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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,949	09/28/2001	Ole Simonsen	10110.200-US	4818
25908	7590	06/03/2004	EXAMINER	
NOVOZYMES NORTH AMERICA, INC. 500 FIFTH AVENUE SUITE 1600 NEW YORK, NY 10110			HENDRICKS, KEITH D	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/966,949

Applicant(s)

SIMONSEN ET AL.

Examiner

Keith Hendricks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-20 is/are rejected.
- 7) ☒ Claim(s) 4, 14-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Pages 5 and 26-27 of the specification describe the methods by which the coated particles containing a gas phase component may be produced. While each of the method steps provided in claim 13 are described, they are stated to be individual methods, each independent from the other. They are not described as usable together; certainly not all three steps. In fact, page 5 of the specification states that steps (b) and (c) as recited in claim 13 are to be one step – due to the fact that a gas phase component cannot be generated in step (b) without step (c) – and that either step (a) or (b)/(c) are to be “selected from”, not used together. Thus there is no support for instant claims 13-20, noting again that 35 U.S.C. 112, first paragraph states that “the specification shall contain a written description of the invention”.

### ***Claim Objections***

Claim 14 refers to the method of claim 13, “comprising step (b).” As claim 13 is currently amended, it already requires step (b). Thus, claims 14-16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

i) Claims 1-3, 5-10, 13-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Mishima (JP 11-197494). The reference and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed February 27, 2004, have been fully considered but they are not persuasive. At page 6 of the response, applicant states that the reference only "discloses using a gas in the preparation of a coating, and, in this regard, there is no disclosure that the resulting coating, as applied to a core particle, comprises a gas phase component. In particular, Mishima discloses using supercritical fluid, such as carbon dioxide, a subcritical fluid and a fluid obtained by adding an additional solvent and gas and using rapid expansion."

This is not deemed persuasive for the reasons of record. Applicant's specification at pages 5 and 26-27, as well as claim 13, recite the step of applying a "coating material comprising a gas generating component to a core particle... and treating the coated particles so as to generate a gas from the gas generating component." As applicant states, Mishima "discloses using a gas in the preparation of a coating." However, applicant did not address the full teachings of the reference, which were presented in the previous Office action. Again, this states that "high pressure is used for implementation of [the] coating", where the coating material is expanded quickly upon pressure release (par. 0025-0056). The suggested maximum working pressure is 41.5 MPa (par. 0033), and the maximum pressure of the exemplified system is 39.2 MPa. "As for a pressure, it is desirable that it is 7.2 – 30 MPa [ $7.2 \times 10^6$  –  $3.0 \times 10^7$  Pa] in order to perform rapid expansion of supercritical fluid efficiently" (par. 0046), thus meeting the limitation of instant claim 18. Stepwise decompression is disclosed in order to add coating materials as well as to expand the coating materials." This meets the limitations of applicant's method claims, absent any clear and convincing evidence and/or arguments to the contrary. Furthermore, given the fact that the same methods and starting materials are utilized in both the reference and the instant claims, and that applicant's method claims state that such methods are "for preparing the particle of claim 1", it would follow that the resultant coating material and coated particle disclosed in the reference meets the limitations of the instant product claims, including claim 3, having "a true density below 0.8 g/cm<sup>3</sup>".

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ii) Claims 1-3, 5-6, 8-11, 13-14, 16-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoen et al. (WO 99/27063). The reference and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed February 27, 2004, have been fully considered but they are not persuasive. At page 6 of the response, applicant states that Thoen et al. "disclose a multi-layered detergent tablet having an effervescent agent in the coating. An effervescent agent is a gas forming agent, it is not a gas phase component. Furthermore, when the effervescent agent is activated, it disintegrates the coating, thus Thoen et al. does not disclose a coating that comprises a gas phase component."

This is not deemed persuasive for the reasons of record. It is unclear as to how applicant's claims may recite the steps of providing core particle with a coating comprising a gas generating component, and "treating the coated particle so as to generate a gas from the gas generating component," and yet somehow differ from the reference teaching the same method steps. It is unclear as to how a resultant coated particle would differ from that of the reference. For example, as previously stated on the record, the reference teaches that "the coating layer may also preferably comprise a disrupting agent" (pg. 16), where "the disrupting agent may be a disintegrating or effervescing agent," and as noted at page 3 of the reference with regard to the detergent actives, "when a disrupting agent is included, the disrupting agent is preferably a salt of carbonate or *bicarbonate and an organic acid*" (emphasis added). This reads upon instant claim 16, which is a specific embodiment of applicant's broader claims. Thus it must also read upon those broad claims, including the independent claim 13. This meets the limitations of applicant's method claims, absent any clear and convincing evidence and/or arguments to the contrary. Furthermore, given the fact that the same methods and starting materials are utilized in both the reference and the instant claims, and that applicant's method claims state that such methods are "for preparing the particle of claim 1", it would follow that the resultant coating material and coated particle disclosed in the reference meets the limitations of the instant product claims, including claim 3, having "a true density below 0.8 g/cm<sup>3</sup>".

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (JP 11-197494), in view of Selenke (US PAT 4,022,917). The references and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed February 27, 2004, have been fully considered but they are not persuasive. At pages 6-7 of the response, applicant states that "Selenke does not motivate an artisan to modify Mishima to arrive at the claimed invention. Selenke discloses the use of a leavening agent, e.g. sodium bicarbonate; however such leavening agent is not in the coating. Rather, the leavening agent of Selenke is part of a core. See, e.g., the abstract of Selenke, clearly noting that the leavening agent is in the core material not the coating material."

This is not deemed persuasive for the reasons of record.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The instant rejection was not made over the teachings of a single reference; thus, applicant's argument that the leavening agent of Selenke "is not in the coating", as applicant states, is not persuasive, as the rejection was made under 35 U.S.C. 103(a), not 35 U.S.C. 102(b).

In response to applicant's arguments, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). This was clearly set forth in the rejection of record, and applicant has not sufficiently addressed or rebutted the rejection. Finally, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce

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the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, this, too, was clearly set forth in the rejection of record, whereas applicant has not sufficiently addressed or rebutted the rejection. .

Thus and again, as stated previously on the record, Mishima teaches that once the desired coated particles are manufactured, they are used in "functional foods, a functional medicine, cosmetics," etc. The core component of Mishima may comprise inorganic or organic substances, such as proteins, enzymes, flavonoids, food additives, drugs and perfumes (par. 0021-0022). As Selenke teaches a process for preparing a premixed batter, comprising "particles of alkaline leavening agent, encapsulated in a water insoluble coating", it would have been obvious to one of ordinary skill in the art to have utilized the microcapsules of Mishima et al. for use in various foodstuffs, including batter doughs such as those disclosed by Selenke, to provide the same desired effect. The use of such coated particles within flour doughs/batters would not have involved an inventive step in the art.

### *Conclusion*

Claim 4 remains objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. While light spheres were known in the art for providing gas phase components, there was no suggestion in the art to utilize such within coating compositions to further provide coated active particles.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**KEITH HENDRICKS**  
**PRIMARY EXAMINER**